

## Project Profile - Coastal Structures



### PROJECT

**Boathouse 4, Portsmouth Historic Dockyard**

### SUMMARY

Concrete repair, chloride and anti-carbonation protection

### PRODUCTS

**Monolite**  
**Monodex Ultra**

### CLIENT

Portsmouth Naval Base Property Trust

### CONTRACTOR

Interserve

### BACKGROUND ►

Boathouse 4 is an iconic building within Portsmouth Historic Dockyard which was constructed during the 1930's rearmament period. It forms part of the UK's maritime heritage and was used during World War II to construct the three man midget X-Craft submarine. In 2014, Portsmouth Naval Base Property Trust (PNBPT) received a £3.75m grant from the Heritage Lottery Fund to transform the historic building into the Boatbuilding and Heritage Skills Training Centre. The Centre opens its doors to the public in April 2015 and a series of courses are being delivered by the International Boatbuilding Training College Portsmouth and Highbury College. Visitors can view exhibitions and see traditional boatbuilding take place. The Centre is also offering bursaries for local unemployed people to complete a year's full time traditional boatbuilding training.

Extensive concrete repairs were required to the external façade and undercroft. Wall areas also needed anti-carbonation protection and it was important that any products chosen were able to tolerate the chloride-laden environment without deterioration.

### THE SOLUTION ►

For areas requiring concrete repair, **Monolite** - an ultra high build, lightweight, non-shrink cementitious mortar - was used. It can be applied by trowel up to 100mm in a single application and was used for overhead, vertical and horizontal repairs. With excellent low sag and rapid hardening properties, it only required the addition of clean water on-site and because it is waterborne, non-hazardous and virtually odourless, it could be safely applied during the refurbishment works whilst other trades continued as normal. Some areas of repair were submerged so the wash-out resistance and chloride protection of **Monolite** was important.

**Monodex Ultra** - an anti-carbonation coating with a design life of 10 years before first maintenance - was also used to protect and decorate a large internal wall within Boathouse 4. **Monodex Ultra** is very fast-drying, allowing two coat applications on the same day and it offers a cost-effective solution for the internal or external refurbishment of buildings. It incorporates an active biocide which inhibits the growth of mould and lichens, ensuring the coating retains a clean, attractive appearance throughout its lifespan. **Monodex Ultra** is available in a range of attractive colours and white was chosen for this project.



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